

WO 02/97123

## INTERNATIONAL SEARCH REPORT

Internu Application No

PCT/CA 02/00761

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12Q1/68 G01N33/50 C07K14/705

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00 55318 A (UNIV BRITISH COLUMBIA ;XENON BIORESEARCH INC (CA)) 21 September 2000 (2000-09-21) * Figure 11, p.66 lines 4-5*	1-33
X	WO 01 15676 A (UNIV BRITISH COLUMBIA ;XENON GENETICS INC (CA)) 8 March 2001 (2001-03-08) page 100, line 4 - line 15; figure 4	1-33
P,X	WO 02 36770 A (ARNOULD REGUIGNE ISABELLE ;AVENTIS PHARMA SA (FR); INST NAT SANTE) 10 May 2002 (2002-05-10) table 2	1-33



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*A\* document member of the same patent family

Date of the actual completion of the international search

3 June 2003

Date of mailing of the international search report

04/07/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Krueger, J

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Interns I Application No

PCT/CA 02/00761

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	LUTUCUTA S ET AL: "NOVEL POLYMORPHISMS IN PROMOTER REGION OF ATP BINDING CASSETTE TRANSPORTER GENE AND PLASMA LIPIDS, SEVERITY, PROGRESSION AND REGRESSION OF CORONARY ATHEROSCLEROSIS AND RESPONSE TO THERAPY" CIRCULATION RESEARCH, GRUNE AND STRATTON, BALTIMORE, US, vol. 88, no. 9, 27 April 2001 (2001-04-27), pages 969-973, XP001016375 ISSN: 0009-7330 the whole document ---	1-33
P,X	ZWARTS K Y ET AL: "ABCA1 regulatory variants influence coronary artery disease independent of effects on plasma lipid levels." CLINICAL GENETICS, vol. 61, no. 2, February 2002 (2002-02), pages 115-125, XP002243112 February, 2002 ISSN: 0009-9163 the whole document ---	1-33
A	PULLINGER C R ET AL: "ANALYSIS OF HABC1 GENE 5' END: ADDITIONAL PEPTIDE SEQUENCE, PROMOTER REGION, AND FOUR POLYMORPHISMS" BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, ACADEMIC PRESS INC. ORLANDO, FL, US, vol. 271, no. 2, 10 May 2000 (2000-05-10), pages 451-455, XP000991244 ISSN: 0006-291X figure 1 ---	1-33
A	CLEE SUSANNE M ET AL: "Common genetic variation in ABCA1 is associated with altered lipoprotein levels and a modified risk for coronary artery disease." CIRCULATION, vol. 103, no. 9, 6 March 2001 (2001-03-06), pages 1198-1205, XP002243113 ISSN: 0009-7322 -----	

# INTERNATIONAL SEARCH REPORT

Int. application No.  
PCT/CA 02/00761

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 23-28 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.: 23-28, 33  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

**Invention 1: claims 1-33 (partially)**

Methods for determining propensity toward developing a cardiovascular disease, development of therapeutic agents, modulators of ABCA1 expression or plasma lipid levels, comprising determining in an ABCA1 gene the presence of a polymorphism, specifically the G191C SNP

**Inventions 2-12: Claims 1-33 (partially)**

Methods for determining propensity toward developing a cardiovascular disease, development of therapeutic agents, modulators of ABCA1 expression or plasma lipid levels, comprising determining in an ABCA1 gene the presence of a polymorphism, specifically the SNPs 2-12 shown in table 1 of the application.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 23-28, 33

Present claims 23-28 relate to a method defined by reference to a desirable characteristic or property, namely using an effective amount of a compound first identified as an ABCA1 modulator.

The claims cover all methods having this characteristic or property, whereas the application provides no support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for such methods. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the method by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible.

Furthermore, present claim 33 relates to a method defined (inter alia) by reference to the following parameter(s): A method for producing a product comprising identifying an agent according to the process of claim 11 or 19 wherein said product is the data collected with respect to said agent as a result of said process and wherein said data is sufficient to convey the chemical structure and/or properties of said agent. It is impossible to compare the parameters the applicant has chosen to employ with what is set out in the prior art. The lack of clarity is such as to render a meaningful complete search impossible.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Intern | Application No

PCT/CA 02/00761

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0055318	A	21-09-2000	AU 3832700 A	04-10-2000
			CA 2367955 A1	21-09-2000
			DE 1100895 T1	06-09-2001
			EP 1100895 A2	23-05-2001
			WO 0055318 A2	21-09-2000
			JP 2003513611 T	15-04-2003
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			WO 0115676 A2	08-03-2001
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			EP 1100895 A2	23-05-2001
			EP 1239848 A2	18-09-2002
			WO 0055318 A2	21-09-2000
			WO 0115676 A2	08-03-2001
			JP 2003513611 T	15-04-2003
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			AU 1063602 A	15-05-2002
			WO 0236770 A2	10-05-2002
			US 2003056234 A1	20-03-2003